Rule CIC253   Default value was specified for the MROLRM keyword

Finding: CPExpert noticed that the default value for MROLRM was specified in the System Initialization Table (SIT).

Impact: This finding should normally have a MEDIUM IMPACT on the performance of the CICS region.

Logic flow: This is a basic finding, based upon an analysis of the daily CICS statistics.

Discussion: The life of mirror transactions in a MRO environment can be extended by specifying MROLRM=YES in the SIT.   The default specification is MROLRM=NO.

- Setting MROLRM=NO causes the mirror transaction to be attached and detached for each function-shipped request until (1) the first request for a recoverable resource or (2) a file control Start Browse is received. After such a request is received, the mirror transaction remains attached to the session until the calling transaction reaches syncpoint.

- Setting MROLRM=YES in the CICS region which receives function shipping requests causes a mirror transaction to remain attached to the MRO session from first request until the calling transaction reaches syncpoint.   IBM reports that this option has system-dependent effects:

    - Some systems show significant improvements in processor utilization per transaction when using MROLRM=YES. Systems which show the most improvement are typically systems with a significant percentage of inquiry transactions, where each transaction has multiple VSAM calls. Other systems which show significant improvement are transactions with many reads followed by a few updates.

    - Some systems show no performance improvement. This category may include workloads using IMS/ESA or transactions that significantly use VSAM update or browse.

    - Some systems could be degraded because there is an extra flow at syncpoint. For example, a system with a very simple inquiry transaction workload might show some degradation.

Beginning with the *CICS Performance Guide* for CICS Version 3.2, IBM recommends that the default be overridden to specify MROLRM=YES for regions receiving function shipping requests. While IBM began making this recommendation only in the CICS Version 3.2 *CICS Performance Guide*, the recommendation applies to CICS Versions prior to Version 3.2.

Suggestion: CPExpert suggests that you consider specifying MROLRM=YES in the SIT for this region.

Reference*:*   *CICS/MVS Version 2.1.2 Performance Guide*: page 216.

                    CICS/ESA Version 3.1.1 Performance Guide: page 280.

                    CICS/ESA Version 3.2.1 Performance Guide: page 223.

                    CICS/ESA Version 3.3.1 Performance Guide: page 241.

                    CICS/ESA Version 4.1.1 Performance Guide: Section 4.8.5.

                    CICS/TS Release 1.1 Performance Guide: Section 4.8.5.

                    CICS/TS Release 1.2 Performance Guide: Section 4.8.5.

                    CICS/TS Release 1.3 Performance Guide: Section 4.12.5.

                    CICS/TS for z/OS Release 2.1 *Performance Guide*: Chapter 24 (MRO and ISC - Batching requests (MROBTCH)).

                    CICS/TS for z/OS Release 2.2 *Performance Guide*: Section 4.11.5 | (Batching requests). |